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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,318	07/14/2003	Paul V. Cooper	23438.00041	7946

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EXAMINER
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KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/620,318	Applicant(s) COOPER, PAUL V.	
	Examiner Scott Kastler	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 27-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/30/05</u> . | 6) <input type="checkbox"/> Other: _____  |

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***Election/Restrictions***

Applicant's election with traverse of Group II (claims 13-20) in the reply filed on 2/2/2006 is acknowledged. The traversal is on the ground(s) that there is no undue burden on the Examiner to search all 5 Groups together. This is not found persuasive because as stated in the original restriction requirement, the diverse nature of the various Groups entail different searches and consideration requiring an undue burden, although in reconsideration, Groups II and III are seen to be to the same general invention and in this respect these two groups will be examined. An action on the merits to claims 13-26 follows.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-12 and 27-37 (Groups I, IV and V) are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 2/2/2006.

***Information Disclosure Statement***

The Examiner acknowledges receipt of the lengthy information disclosure statement filed **June 30, 2005**. There is no requirement that applicants explain the materiality of English language references, however the cloaking of a clearly relevant reference in a long list of references may not comply with applicants' duty to disclose, see Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., 359 F. Supp. 948, aff'd 479 F. 2d. 1338. There is no duty for the Examiner to consider these references to a greater extent than those ordinarily looked at during a regular

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search by the Examiner. Accordingly, the Examiner has considered these references in the same manner as references encountered during a normal search of Office search files.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 13-26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-20 of copending Application No.

10/773,105 in view of the admitted prior art of the instant disclosure. Claims 16-20 of the '105 application disclose a coupling including a non-threaded end made of steel showing all aspects of the above claims except the use of a counterweight or internal gas passage. The admitted prior art of the instant disclosure, at paragraph [0053] for example, teaches that such features were known to be employed in couplings for use in rotary degassers in order to improve performance. Because improved performance would also be desirable in the coupling of the '105 application,

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motivation to include a counterweight and gas passage would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 17, 19, 21, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Mordue'467. Mordue'467 teaches a rotary degasser including a coupling (44) with proximal (54) and distal (56) ends where the distal end is tapered and not threaded, including a bore therethrough which is smooth and could be employed for transferring gas, thereby showing all aspects of the above claims.

Claims 14, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ecklesdafer'652. Ecklesdafer'652 teaches a coupling (3) with proximal and distal ends where the distal end is tapered and not threaded, including a bore therethrough which is smooth and could be employed for transferring gas, thereby showing all aspects of the above claims since that manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. see MPEP 2114.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by WO'990. WO'990 teaches a coupling (1) including first (9) and second ( 18) coupling members where the second

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coupling member includes apparatus (6) extending beyond an external wall, for connecting the second coupling member to a shaft, thereby showing all aspects of the above claims.

Claims 14-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Winberg et al. teaches a coupling (C) with proximal (76) and distal (32) ends where the distal end is tapered and not threaded, where the proximal end is threaded, including a bore therethrough which is smooth and could be employed for transferring gas, thereby showing all aspects of the above claims since that manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. see MPEP 2114.

Claims 14, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by either of Mars et al or Sparling. Each of Mars et al and Sparling teaches a coupling (30 in Mars et al, figures 1-6 of Sparling) with proximal and distal ends where the distal end is tapered and not threaded, including a bore therethrough which is smooth and could be employed for transferring gas, thereby showing all aspects of the above claims since that manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. see MPEP 2114.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by each of WO'031, Cooper'496, Cooper'807, Cooper'000, and Cooper'525. Each of WO'031 (Figure 10a), Cooper'496 (Figures 10 and 10a), Cooper'807 (100 in figure 2), Cooper'000 (600 in figure 14), and Cooper'525 (600 in figure 14), teach couplings showing all aspects of the above claims.

Claims 14, 17, 19, 21, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Mordue et al'247. Mordue et al'247 teaches a rotary degasser (1 in Figures 1 and 2) including

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a coupling (21) with a proximal and non-threaded, tapered distal end with a smooth bore therein which can allow gas transfer, thereby showing all aspects of the above claims.

Claims 14, 17, 19, 21, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper'074. teaches a rotary degasser (10) including a coupling (38) with a proximal (44) and non-threaded, tapered distal (42) end with a smooth bore therein which can allow gas transfer, thereby showing all aspects of the above claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 16, 18, 20, 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Either of Mordue et al'247 or Cooper'074 as applied to claims 14 and 21 above, in view of Howie et al and the admitted prior art of the instant disclosure. As applied above, each of Mordue'247 and Cooper'074 show couplings and rotary degassers showing all aspects of the above claims except the specific use of a "course" threaded proximal end, stainless steel as the coupling material, or the inclusion of a counterweight on the coupling, although each of Mordue et al'247 and Cooper'074 allow for the use of any desired material for the coupling construction and allow for the use of a threaded proximal end. Howie et al teaches that at the time the invention was made, it was known in the art to both employ a coupling device (65, 63) for the connection of shaft components in a rotary molten metal device, which includes a

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tapered, non-threaded end (65) and a threaded end (63) where the threads may be considered "course", as well as constructing the components from stainless steel (see col. 5 lines 10-40 for example). Because each of Mordue et al'247 and Cooper'074 would require some type of material for the construction of the disclosed couplings as well as some connection means to be employed in the proximal ends of the couplings, motivation to employ commonly known connections and materials, as taught by Howie et al, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

The admitted prior art of the instant disclosure, at paragraph [0053] for example, teaches that counterweights were known to be employed in couplings for use in rotary degassers in order to improve performance. Because improved performance would also be desirable in the couplings of each of Mordue et al'247 and Cooper'074, motivation to include a counterweight as taught by the admitted prior art of the instant disclosure would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

### ***Conclusion***

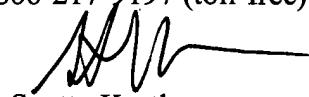
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler  
Primary Examiner  
Art Unit 1742

sk